

VIII. *Descriptions of new genera and species of Tenthredinidæ and Siricidæ, chiefly from the East Indies, in the Collection of the British Museum.* By PETER CAMERON.

[Read 5th July, 1876.]

TENTHREDINIDÆ.

*Hylotoma albocincta.*

♀. Dark blue, pilose, the 3rd abdominal segment banded with white all round. Clypeus roundly emarginated; antennæ longer than head and thorax. Wings hyaline, the marginal and submarginal cellules (except at the lower part) smoky; costa dirty white; stigma sordid luteous, darker at the base; tegulæ dirty white. Feet white, four anterior tibiæ entirely and posterior at the apical half dark blue; posterior tarsi fuscous.

Length 11 lines.

*Hab.*—Nepaul.

*Obs.*—*Hylotoma janthina*, Klug, is in the collection from Java, Nepaul, North India and Sumatra.

*Hylotoma xanthogaster.*

♀. Deep bluish-black, shining, pubescent; belly, abdomen at the sides, and anus, yellow; palpi black; blotch large; cenchri large, white; anus hairy, terebra projecting. Feet slightly darker than thorax. Anterior wings more or less smoky; posterior pair almost hyaline, 2nd submarginal cellule with a distinct horny point.

Length  $6\frac{1}{2}$  lines.

*Hab.*—Nepaul.

*Hylotoma lutea.*

♀. Dark luteous, pubescent; antennæ and abdomen paler, the latter marked with black transverse dorsal lines separated in the middle; metanotum marked with black. Head deep blue-black. Feet blue-black, darker than the colour of the head; posterior femora more or less sordid luteous above and beneath. Wings dark smoky; costa and stigma black.

♂. Similar, but posterior femora with scarcely any black, and abdomen immaculate.

Comes near to *H. humeralis*, Sm., but has clearer wings, mesonotum devoid of black; coxæ and trochanters black in ♀; in the ♂ the tibiæ are black. From *H. trinotata*, Sm., it differs in having the breast and mesonotum immaculate, and posterior femora marked with black.

Length 6 lines.

*Hab.*—North India.

*Hylotoma microcephala.*

♀. Luteous, pubescent; abdomen paler; antennæ black, testaceous in the middle. Head small, blue-black, a spot on the breast of the same colour; cenchri bordered with black. Feet dark testaceous; femora and tarsi marked with black. Wings deep blue-black, iridescent; posterior wings lighter. Anus blackish.

♂. Antennæ luteous, slightly pilose; feet testaceous; breast scarcely marked with black.

Length 6—7½ lines.

*Hab.*—Amoy.

*Hylotoma flavicollis.*

♀. Deep blue-black, shining; sides of breast to the middle, pro- and meso-notum bright yellow. Wings bluish-black. Broad, thick. Antennæ pilose, a little longer than head and thorax. Blotch large.

Length 9 lines.

*Hab.*—Hong Kong.

*Athalia tibialis.*

♀. Luteous, shining; antennæ, head, posterior half of mesonotum, metanotum, tarsi and posterior tibiæ, four anterior tibiæ above, and sheaths of saws, black. Head covered with a scattered pubescence, palpi pale testaceous, lower edge of clypeus (occasionally) white. Wings smoky; costa and stigma black; tegulæ luteous.

♂ has the two basal joints of antennæ beneath, and apex of clypeus with the labrum, white; the clypeus very hairy, and the calcaria pale.

Length 4¼ lines.

*Hab.*—East Indies.

*Obs.*—An *Athalia* is in the collection, from the west coast of Africa, which I cannot separate satisfactorily from the common *A. rosæ*. Another species of the same genus

from Japan appears to be *A. spinarum*, differing only from the European form in having the black on the thorax broadly divided in the middle.

*Monophadnus rufus*.

♀ and ♂. Rufous; antennæ, from two basal joints, apex of mesonotum with scutellum, metanotum, and terebra at apex, black. Antennæ longish, 3rd joint a very little longer than 4th. Wings blackish, paler at apex; costa and stigma deep black. Marginal nervure received past middle of 3rd submarginal cellule; 2nd submarginal cellule with a black dot.

Aberration b. Meso- and meta-notum, base of abdomen, breast and pleuræ, black. Antennæ with the four basal joints pale-reddish.

Length 7 lines.

*Hab.*—North China.

*Monophadnus cærulescens*.

♂. Dark-blue, half shining, pubescent. Antennæ shorter than body, thick, a little hairy; 3rd joint nearly double the length of 4th. Cenchri large, white. Wings shortish, hyaline; costa and stigma black; a slight cloud below the stigma. Marginal nervure received a little past the middle of third submarginal cellule.

Length 7 lines.

*Hab.*—Nepaul.

*Monophadnus bengalensis*.

♀. Facies of a *Tenthredo*. Blue-black. Feet white; coxæ at base, apex of femora (especially posterior pair), apex of posterior tibiæ and tarsi, black. Clypeus rounded, face very hairy; 3rd joint of antennæ much longer than 4th. Terebra projecting. Wings subhyaline, darkened at apex, marginal nervure received past middle of third submarginal cellule; posterior wings as in *Eriocampa*. Tegulæ black.

Length 7 lines.

*Hab.*—Bengal.

ANISOARTHRA, gen. nov.

Antennæ covered with long pressed hairs, with 3rd and 4th joints equal, a little dilated at apex; 5th a little longer than 4th, also dilated at apex; 6th nearly a fourth shorter

than 5th, still more dilated at apex, and sharply cut off from 7th, which is much shorter than 6th; two apical joints a little shorter than 7th. Clypeus smooth, straight at apex. Alar neurulation of *Monophadnus*; marginal nervure received a little past middle of third submarginal; posterior wings with one middle cellule. Scutellum raised, conspicuous, smooth and shining.

*Anisoarthra cœrulea.*

♀. Blue, shining, Head and thorax pilose. Antennæ shorter than abdomen. Terebra projecting, hairy. Spurs long. Wings bluish-black, iridescent; costa and stigma bluish-black.

♂. Similar, but with longer antennæ and wings clearer at base.

Length 7 lines.

*Hab.*—Ceylon.

*Anisoarthra cyanella.*

♀. Bluish-purple, shining, pubescent; similar to *A. cœrulea*, but smaller, and colour with a purplish tinge; wings darker, third submarginal cellule shorter; antennæ shorter, more thickened towards the apex, the three apical joints not being so sharply cut off from preceding, and the anterior feet are pale in front.

In the ♂ the antennæ are shorter, more thickened towards the apex; posterior wings darker. The antennæ look not unlike those of *Athalia*.

*Hab.*—Ceylon.

*Eriocampa ruficornis.*

♀. Black. Head and thorax deep and coarsely punctured, opaque; apex of clypeus and antennæ reddish; pronotum marked with red, cenchri white. Abdomen with four segments red; anus reddish; terebra projecting, red. Legs pale testaceous; coxæ, trochanters, femora and apical third of posterior tibiæ black; calcaria pale. Wings hyaline; nervures, costa and stigma pale testaceous; tegulæ black.

Length  $7\frac{1}{2}$  lines.

*Hab.*—North China.

The legs are longer than in the European species. Probably the largest species in the genus.

ALLOMORPHA, gen. nov.

Antennæ with the 3rd joint considerably longer than 4th; 5th, 6th, 7th and 8th gradually becoming thickened, shorter and sharply divided from preceding; 9th considerably thinner than and sharply divided from 8th. Clypeus very deeply incised, labrum rounded. Body has the form of *Tenthredo*, but the alar neuration resembles that of *Strongylogaster* (*cingulatus* group). Patellæ not so sharply developed as in the latter genus; basal tarsal joint nearly two and a half times longer than the following; spurs short, thick; posterior tarsi longer than the tibiæ. Abdomen smooth, shining. Breast and pleuræ punctured.

*Allomorpha incisa*.

♀. Antennæ black; three basal and three-fourths of 4th joint clear white. Head black, shining, finely punctured; labrum, clypeus and a border round the eyes white; labrum hairy. Thorax black, pilose. Tegulæ, scutellum and a band below the cenchri, white. Scutellum punctured. Abdomen black; the basal segment and a line down the back, with the anal segment in the middle, dirty white. Wings hyaline; stigma sordid testaceous; costa blackish. Feet sordid yellowish-white; coxæ at base, posterior femora and apex of tibiæ black.

Length 10 lines.

*Hab.*—North China.

✓ ANISONEURA, gen. nov.

Antennæ a little longer than the abdomen, pilose; the 3rd joint a little longer than 4th, the remaining joints shorter; the 5th, 6th and 7th thickened; the 9th conical, thinner than 8th. Clypeus not incised. Wings with two marginal and four submarginal cellules, the two marginal about equal; the second submarginal shorter than the third, which is dilated at apex. Marginal nervure received a little past the middle of third submarginal cellule; first recurrent received in front of middle of second submarginal cellule; second recurrent joined to second submarginal nervure. Lanceolate cellule of *Strongylogaster*. Posterior wings with one middle cellule. Body form of *Macrophya*. Posterior coxæ large.

*Anisoneura stigmatalis.*

♀. Colour of *Tenthredo erratica*, Sm.; pilose. Antennæ from 4th joint black; three apical segments of abdomen and posterior tarsi black. Wings hyaline, nervures yellowish at base, black at apex; costa and stigma yellow, the latter black at apex. Anterior wings clouded from base of stigma.

Length 9 lines.

*Hab.*—North China.

*Allantus flavomaculatus.*

♀. Black, shining; sides of breast opaque, punctured. Antennæ (except four apical joints), clypeus, labrum, palpi, a spot below the ocelli, edge of pronotum, scutellum, a spot below the tegulæ (sometimes absent), a large round spot at posterior coxæ, sometimes two spots before the scutellum, and a number of spots on sides of abdomen (the abdominal marks sometimes extending across the back), yellowish. Legs yellowish; coxæ at base, apical half of posterior femora and apex of posterior tibiæ with the spurs black. Head pilose, clypeus deeply incised. Wings almost hyaline; costa and stigma black. There is a pale spot over the anal segment.

Length  $11\frac{1}{4}$  lines.

*Hab.*—North China.

The colour appears to have faded, probably through having been kept in spirits.

*Allantus trochanteratus.*

♀ Black; head pilose, sides of breast opaque, punctured. Clypeus, labrum, pronotum and tegulæ, a large square spot over the anus, a small one on each side of the second, third and fourth abdominal segments, yellowish-white; the pronotum and tegulæ have a reddish tinge. Apex of coxæ and trochanters pale yellow; femora black; knees, tibiæ and tarsi reddish, the tarsi annulated with black. Antennæ thickened towards the apex; apex of labrum brownish, hairy; mandibles brownish, palpi white. The third, fourth and fifth abdominal segments are annulated with white in both sexes.

♂ has the labrum entirely white.

Length  $8\frac{3}{4}$  lines.

*Hab.*—North India.

✓ *Pachyprotasis versicolor*.

♀. Head black; the lower part of face (except a black band over the clypeus) and orbits of the eyes whitish-yellow. Clypeus small, incised; labrum large; tips of mandibles black; palpi and two small spots below the ocelli and two basal joints of antennæ white beneath. Thorax black, shining; a line on pronotum, a spot on mesonotum, scutellum, a spot on metanotum, a spot below the tegulæ, on the sides of the breast and sternum, white. Sides of breast opaque, punctured. Abdomen black, basal segment red; spots along the sides, a large spot over the anus and belly, more or less white. Legs red, coxæ and base of femora white; coxæ punctured, with a large black spot on posterior pair, and a white spot over them. Antennæ longish, black, seventh and part of eighth joint white. Wings hyaline; costa and stigma black, the latter pale at the base.

Length  $8\frac{1}{2}$  lines.

*Hab.*—North India.

✓ *Macrophya rotundiventris*.

♂. Antennæ about the length of the abdomen, thin, black, two basal joints whitish-yellow. Head deep black, covered with long hairs; labrum and clypeus whitish-yellow, mandibles piceous. Pro- and meso-thorax to the cenchri and to the middle of the sides beneath reddish, with two black spots in front of scutellum; metathorax black. Abdomen cylindrical, sordid yellow, black at the sides above and at the anal segments; belly and sides pale yellow. Feet pale yellow; a short line above middle femora, posterior femora entirely above, base of coxæ, and apical half of posterior tibiæ, black; posterior tarsi thickish, hairy. Wings hyaline; costa and stigma testaceous; apex smoky.

Length 11 lines.

*Hab.*—North India.

*Tenthredo incerta*.

♀. Black, shining, with a bluish tinge. Head smooth, shining, covered with white hairs. Pronotum, sides of breast and metanotum red; second and third abdominal segments banded with white; blotch very large. Terebra projecting, hairy. Antennæ short, thick, pilose; two basal joints large, third much longer than fourth. Legs white; apex of coxæ, greater part of femora and apical

third of posterior tibiæ and tarsi black. Wings subhyaline, with a deep black splash below the stigma; costa hairy.

Length  $8\frac{1}{2}$  lines.

*Hab.*—Burmah.

The lanceolate cellule does not agree with that of *Tenthredo*, it having an oblique cross line as in *Emphytus*, &c.; but I cannot find other characters to separate it from *Tenthredo*. It may form a new subgenus.

✓  
*Tenthredo amoorensis.*

♀. Black, shining, mouth below the antennæ, inner orbits of the eyes, tegmæ and pronotum white. Abdomen from second to the three last segments reddish. Feet pale testaceous, inclining to white; two anterior femora at base, posterior almost wholly and apex of tibiæ black; trochanters pale, tibiæ and tarsi whitish; tips of tarsi fuscous, calcaria long. Antennæ shortish, black above, pale testaceous beneath; third joint longer than fourth. Wings hyaline; costa pale, stigma fuscous; a black narrow cloud extending from stigma to base of wing. Mandibles black.

Length  $5\frac{1}{4}$  lines.

*Hab.*—Amoor.

Belongs to *Perineura* (*Aucupariæ* section), as defined by Thomson.

✓  
*Tenthredo metallica.*

♀. Metallic green, shining; abdomen bluish above. Feet dark blue; tarsi longer than tibiæ. Antennæ with a purplish tinge, longer than abdomen, tapering towards the apex; the basal joint long, thick. Head depressed considerably between the eyes, which are small, the antennæ proceeding from sharp ridges. Anterior wings black, fainter at apex; posterior hyaline.

Length 13 lines.

*Hab.*—North India.

✓  
*Tenthredo clypeata.*

♀. Similar to *metallica*, but colour dingier; antennæ shorter, thicker, the joints not tapering so much towards the apex, and shorter in proportion, the third joint considerably longer than fourth; the head not so deeply depressed inwardly above, and behind the eyes: the ocelli a little more raised, the clypeus clear white and a little smaller.

*Hab.*—North India.



*Tenthredo xanthoptera*.

♀. Reddish-yellow; antennæ, except two basal joints, posterior tibiæ and tarsi, black. Wings yellowish, nervures and costa yellow; apex of wing clouded with a black inky cloud in both wings proceeding from the stigma. Mandibles black.

Length  $13\frac{1}{4}$  lines.

*Hab.*—Nepaul.

*Tenthredo trimaculata*.

♀. Sordid luteous, punctured; antennæ from fourth joint, three marks on mesonotum and thorax beneath black. Mesonotum opaque, sides of breast closely punctured and pilose; clypeus arched. Wings hyaline; costa and stigma sordid luteous; second submarginal cellule with a black dot; nervures black.

Length  $10\frac{1}{2}$  lines.

*Hab.*—North China.

*Tenthredo melanotarsus*.

♀. Of similar size and colour to *T. erratica*, Sm., from Japan, but antennæ black (except the two basal joints) and a little longer; head devoid of black, clypeus more deeply and sharply incised and sordid white; no marks on thorax either above or beneath; posterior tarsi black, the apex of abdomen purplish black. Wings yellower, with the nervures yellow, and the apical cloud in the wings with a purplish tinge.

*Hab.*—North China.

*Tenthredo xanthotarsus*.

♀. Similar in size and colour to *melanotarsus*, but posterior tarsi not black; nervures of wings black, with the apical cloud and the yellow colour fainter; clypeus not so deeply notched and bright yellow; the apex of abdomen black, but without a purple tinge, and a black line over posterior femora.

From *T. erratica* it is known by the black antennæ (except at the base) and the absence of black on thorax, &c.

*Hab.*—Japan.

*Tenthredo xanthopus*.

♀. Antennæ black, pilose, apical joints thicker than basal; at the base white, and the basal joint has a short

peduncle. Mouth, clypeus and labrum with the lower orbits of the eyes white; clypeus slightly arched, vertex covered with longish hairs. Thorax black; pronotum, scutellum, part of metanotum, and a large part of the sides of thorax in the middle, yellowish; pleurae smooth, shining; abdomen sordid yellow, with a broad black border above and surrounding the anal segments; terebra black, hairy, projecting. Feet yellowish-white, four anterior tarsi annulated with black; a line above the apical half of middle femora, tibiae and tarsi, a line above posterior femora, and posterior tibiae and tarsi, totally black. There is also a black line over posterior coxae. Wings hyaline, iridescent; costa and stigma black, hairy. Clypeus slightly incised. Tips of mandibles black.

Length  $8\frac{1}{2}$  lines.

*Hab.*—Japan.

The colour has faded.

✓ *Tenthredo indica.*

♂. Antennae nearly as long as the body; the 3rd joint a very little longer than the 4th, black; the 5th and base of 6th (in one antenna only) white; four last joints somewhat thicker than the others. Head black; sutures distinct; lower part of face with a broad, white band round the eyes (but not behind); mandibles black, clypeus slightly incised; palpi white. Thorax black, finely punctured; edge of pronotum, a spot below the tegulae under the wings, a large spot under posterior wings, edge of tegulae, a triangular spot in middle of mesonotum, scutellum, and two small spots behind scutellum, white. Abdomen black, marked at the sides and across with white. Legs white, coxae at base, four anterior femora above, posterior totally, apical half of tibiae (the anterior tibiae are white beneath), and the apical joints of tarsi, black; calcaria black; posterior tarsi very hairy. Wings hyaline; costa and stigma black.

Length 9 lines.

*Hab.*—North India.

✓ *Tenthredo flavobalteata.*

♀. Antennae black, two basal joints white. Head black, smooth, shining; clypeus and labrum white. Mandibles black. Thorax black, pronotum edged with white; tegulae testaceous. Abdomen black; the two middle

segments yellow. Feet yellow; coxæ at base, middle femora above, posterior almost wholly, apex of posterior tibia, with the tarsi at the joints, black. Wings hyaline, with a small smoky cloud at the apex; costa and stigma fuscous. Legs covered with scattered hairs.

Length  $10\frac{1}{2}$  lines.

*Hab.*—North China.

Allied to *T. bicincta*, Linn.

✓  
*Tenthredo obscura.*

♀. Pale olive, not unlike the colour of *T. olivacea*, but more faded. Antennæ about the length of the abdomen; apical joints whitish, except the last, which is black; 3rd joint considerably longer than 4th; clypeus deeply incised, paler than the colour of the head. Abdomen about a fourth longer than the head and thorax, dilated at apex. Femora black above at the base; a line above the four posterior tibiæ and joints of tarsi black. Legs hairy. Spurs black. Ocelli black.

Length  $12\frac{1}{4}$  lines.

*Hab.*—North China.

Has a faded look, as if it had been pure yellow when alive.

*Dolerus rufocinctus.*

♀. Deep black, with a bluish tinge, pilose. Pro- and part of meso-notum in front, tegulæ, and second to sixth abdominal segments, red. Wings hyaline; costa and stigma deep black; basal part of costa yellow. Apex of abdomen and head densely covered with long white hairs. Head coarsely punctured.

Length 6—7 lines.

*Hab.*—India.

*Dolerus bicolor.*

♀. Black. Head deep, coarsely punctured, glabrous, covered with a scattered pubescence; clypeus incised. Pro- and anterior edge of meso-notum above and beneath, and abdomen from basal segment, yellowish-red. Meso-notum opaque, punctured; terebra projecting, black, hairy. Wings deep smoky, hyaline at apex; posterior wings lighter; costa and stigma deep black; tegulæ black; cenchri white; calcaria pale.

Length 10 lines.

*Hab.*—North China.

*Dolerus affinis.*

♀. Of similar colour to *D. ephippiatus*, Sm., but smaller; antennæ shorter, thinner; underside of thorax bluish-black, not reddish; a black spot in front of mesonotum; head a little more closely punctured; feet, head and breast not so pilose, and wings a little darker.

*Hab.*—China.

*Dineura (?) africana.*

♂. Black; antennæ pilose, 3rd joint longer than 4th, basal joint large, furnished at base with a short white peduncle. Head large; clypeus small and very deeply incised; labrum large, hairy; palpi white. Thorax smooth, shining, tegulae black; a spot below the wings white. Legs white, posterior tarsi fuscous. Wings half smoky; marginal nervure received a little past the middle of third submarginal cellule; first recurrent nervure received near the middle of second submarginal cellule, and second recurrent near the apex of third submarginal cellule; third submarginal cellule considerably dilated. Posterior wings with two middle cellules; anterior wings with neuration of *Blennocampa*.

Length 6 lines.

*Hab.*—Sierra Leone.

This species will, I think, prove to be the type of a new genus, having affinities with *Blennocampa*. I place it temporarily in *Dineura*, as the alar neuration comes nearest to that genus.

## SIRICIDÆ.

*Tremex Smithi.*

♀. Bluish-black, with a purplish tinge, roughly and deeply punctured. Head, feet and apex of abdomen covered with long hairs; on the face the long hair hangs down like a beard. Abdomen marked with white along the sides; base of posterior femora above and base of tarsi white. Terebra brownish. Wings short, blackish, pale hyaline at base. Apex of abdomen at the sides acutely serrated.

Length  $15\frac{1}{2}$  lines.

*Hab.*—North India.

In one of the anterior wings in the lanceolate cellule, instead of the usual cross nervure there is a small triangle,

the other wing having the normal neuration. Comes near to *T. pandora*, Westw., but differs in the white markings, &c. I have dedicated the species to Mr. F. Smith, of the British Museum.

*Sirex xanthus*.

♀. Reddish-yellow; head and abdomen paler, punctured, covered with long hairs; mouth parts brownish; space between and above the antennæ brown, extending to the back of the head in a narrow black line. Sutures of mesonotum and metanotum black. Thorax beneath and at sides fuscous-black, with a large yellow spot below the tegulæ. Antennæ and feet yellow. Wings fuscous-yellow; costa yellow, stigma black. Anal segment with a black line. Terebra reddish-yellow, of the same size as in *S. gigas*.

Length 19 lines.

*Hab.*—North India.